

# **2015 Consumer Confidence Report: Drinking Water Quality**

## **California Redwood Company/Green Diamond Resource Company**

### **California Operations**

### **Korbel, California**

*Este informe contiene información muy importante sobre su agua beber. Tradúzcalo o hable con alguien que lo entienda bien.*

We are pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. The Korbel, CA community takes its water from two different wells located in the bed of the North Fork of the Mad River. These wells draw water from the sands and gravels of the riverbed at depths ranging from 125 to 200 feet. This naturally filtered water is then disinfected via chlorination and delivered without further treatment. One new well was installed in 2004, due to a casing failure.

The Timberlands Division now uses its water from the permitted water system for the saw mill and township. Additional water samples are collected at the timberlands office to ensure safe drinking water standards are also met, at this location. The Timberlands system also has a separate chlorination system. We have a 2500 gallon storage tank for the timberlands water system to eliminate draw down of the delivery pipes going to the sawmill.

The California Redwood Company Korbel water system is staffed by two (2) California State Certified Drinking Water Distribution and/or Treatment Operators, including: Grade D1 (Distribution 1), Grade D2 (Distribution 2), & Grade T2 (Treatment 2) Certifications. Our Lead Operator and Shift Operator have attended Drinking Water Treatment Technology courses, maintaining their eligibility for certification with the California State Water Resources Control Board-Division of Drinking Water, until November 1, 2018.

We are pleased to report that our drinking water is safe and meets all Federal and California State requirements. If you have any questions about this report or concerning your water utility, please contact John Davis at (707)668-4414.

California Redwood Company, Korbel routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2015. For those regulated, the system is allowed to monitor for less often than once a year, the most recent testing done in accordance with the regulation has been used. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

During the month of February 2015, our water system detected a presence of total coliform in the untreated, groundwater source. Total coliform bacteria (with a few exceptions) are not harmful to humans. Although this incident was not an emergency, as our customers, you have a right to know what happened, and what we did to correct this situation. No untreated water entered the drinking water distribution system.

The presence of total coliform bacteria can be a sign that a potential problem exists in the water treatment or distribution system (pipes). Total coliforms are bacteria which are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria, such as E. coli, may be present. Whenever we detect total coliform bacteria in any water sample, we do follow-up testing and check for the presence of other bacteria of greater concern, such as fecal coliform or E. coli. We did NOT find any fecal coliform or E. coli bacteria in our subsequent testing.

The source of the coliform bacteria in the untreated water system was positively identified, as evidence indicated total coliform bacteria were introduced into the untreated groundwater through a cross connection, during low pressure conditions, in the water distribution system. The cross connection was immediately corrected, upon detection. Also, the affected portion of the water system was flushed and further routine testing indicated that the problem was resolved. Finally, during the month of March 2015, a well pump control pressure-switch was installed in the water distribution system, to prevent future low pressure conditions, within the water distribution system.

In the following table, you will find many terms and abbreviations that you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

*Parts per quadrillion (ppq) or Picograms per liter (picograms/l)* - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*Millirems per year (mrem/yr)* - measure of radiation absorbed by the body.

*Million Fibers per Liter (MFL)* - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

*Regulatory Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*Treatment Technique (TT)* - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Maximum Contaminant Level* - (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

*Maximum Contaminant Level Goal* - (mandatory language) The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

*Public Health Goal or PHG* – (mandatory language) The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

# TEST RESULTS

(available for Year 2015)

Contaminant	Violation Y/N	Level Detected	Range	Unit Measurement	MCL	PHG	MCLG	Sample Date (MM/DD/YY)	Likely Source of Contamination
<b>Microbiological Contaminants</b>									
1. Total Coliform Bacteria	N	ND			presence of coliform bacteria in < 5% of monthly samples	N/A	0	Monthly 2015	Naturally present in the environment.
3. Turbidity	.0700	ND		NTU	TT	N/A	N/A	04/14/14	Soil runoff.
<b>Radioactive Contaminants</b>									
5. Alpha Activity, Gross	N	.6160		pCi/L	15.000	N/A	N/A	02/19/10	Erosion of natural deposits.
<b>Inorganic Contaminants</b>									
10. Aluminum	N	ND		ppb	1000.000	N/A	N/A	04/14/14	Erosion of natural deposits; residue from some surface water treatment processes.
11. Antimony	N	ND		ppb	6.000	20	N/A	04/14/14	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
12. Arsenic	N	ND		ppb	10.000	N/A	N/A	04/14/14	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
13. Barium	N	ND		ppb	1000.000	N/A	2	04/14/14	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits.
14. Beryllium	N	ND		ppb	4.000	N/A	4	04/14/14	Discharge from metal refineries, coal-burning factories, and electrical, aerospace, and defense industries.
15. Cadmium	N	ND		ppb	5.000	.07	N/A	04/14/14	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories and metal refineries; runoff from waste batteries and paints.
16. Chromium	N	ND		ppb	50.000	2.5	N/A	04/14/14	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
17. Copper	N	.064		ppm	1000.000 AL=1.3	0.17	N/A	02/19/13	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

18. Fluoride	N	.1300		ppm	2.000	1	N/A	04/14/14	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
19. Lead	N	.01		ppm	AL=15	2	N/A	02/19/13	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
20. Mercury (inorganic)	N	ND		ppb	2.000	1.2	N/A	04/14/14	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.
21. Nickel	N	ND		ppb	100.000	N/A	100	04/14/14	Erosion of natural deposits; discharge from metal factories.
22. Nitrate (as Nitrogen)	N	ND		ppm	10.000	10	N/A	12/21/15	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
23. Nitrite (as Nitrogen)	N	ND		ppb	1000.000	1	N/A	12/21/15	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
24. Selenium	N	ND		ppb	50.000	N/A	50	04/14/14	Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive).
25. Thallium	N	ND		ppb	2.000	0.1	N/A	04/14/14	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories.
26. Iron	N	ND		ppb	300.000		N/A	04/14/14	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
27. Sodium	N	7.3		ppm			N/A	12/21/15	Salt present in the water and is generally naturally occurring.
28. Hardness (Total) as CaCO <sub>3</sub>	N	180		ppm			N/A	12/21/15	Sum of polyvalent cations present in the water, generally magnesium.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected. The EPA has determined that your water is SAFE at these levels. A vulnerability study was done by Simpson in January 28, 2002. A copy of the study can be obtained at the Korb, CA Office. Our wells are near office buildings, managed forestlands, nursery, surface waters of the Mad River, and a roadway. These wells are 200 feet deep so the vulnerability to outside contaminants is very low.

In order to ensure that tap water is safe to drink, USEPA and the California Department of Health Services prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1 (800) 426-4791. Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the **EPA's Safe Drinking Water Hotline at 1 (800) 426-4791.**

**The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells.** As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Prior to Drinking Water Treatment, contaminants may be present in source water, including:

- **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.
- **Total Coliform**: Water systems are required to meet a strict standard for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If the standard is exceeded, the water supplier must notify the public by newspaper, television or radio.
- **Nitrates**: As a precaution, we always notify physicians and health care providers in this area, if there is ever a higher than normal level of nitrates in the water supply.

**- Lead:** Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced. People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers, as well. General guidelines on ways to lessen the risk of lead exposure are available from the **EPA's Safe Drinking Water Hotline at 1 (800) 426-4791.**

### **Additional General Information on Drinking Water**

Lead-Specific Language for Community Water Systems: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. California Redwood Company/Green Diamond Resource Company is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/lead>.

Please call our office if you have any questions. CA Redwood/Green Diamond Resource Co. (707)268-3042.

**Consumer Confidence Report  
Certification Form  
2015**

Water system name: California Redwood Company Korbel Water System

PWS I.D. no: 1200715

The water system named above hereby confirms that its consumer confidence report has been distributed to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the primacy agency.

Certified by: John Davis

Title: Manager of Logging Operations

Phone #: (707)668-4414 Date 04/08/2016